



BREATH OF THE FUTURE: UNVEILING YOUTH PERSPECTIVES ON AIR QUALITY IN EASTERN INDIA



Exploration into Youth Perspectives on Air Quality Conducted
by SwitchON Foundation

TABLE OF CONTENTS

7

REFERENCE

6

WAY FORWARD

5

OBSERVATIONS

4

FINDINGS

PERCEPTION OF AIR POLLUTION AS A THREAT
PERCEPTION OF THE LARGEST CONTRIBUTOR TO AIR POLLUTION
PERCEPTION OF MITIGATION STRATEGIES FOR AIR POLLUTION

3

METHODOLOGY

2

AIMS & OBJECTIVES

1

INTRODUCTION

Abstract



This report by SwitchON Foundation delves into the youth's perception of air quality in Eastern India, emphasizing the severity of air pollution and its health impacts. Through extensive surveys conducted in West Bengal, Jharkhand, and Odisha, the study reveals high awareness levels among youths, identifying vehicles and industries as primary contributors. The findings underscore the need for policy advocacy, eco-friendly transportation, and renewable energy promotion. Notably, youth actively endorse environmental education initiatives. The observations highlight regional nuances, while the forward strategy calls for collaborative efforts, community-driven initiatives, and incentivizing green innovations to pave the way for a sustainable and healthier future.

Keywords:



Youth Perception, Air Quality, Eastern India, SwitchON Foundation, Air Pollution, Mitigation Strategies, Environmental Awareness, Health Impacts, Sustainable Future, Policy Advocacy.

Introduction



In India, the pervasive challenge of air pollution poses a significant threat to both public health and the environment. Rapid industrialisation, vehicular emissions, and unorganised waste management contribute to dangerously high levels of pollutants (Gurjar, 2021). This critical situation manifests in respiratory diseases, cardiovascular complications, and environmental degradation, necessitating urgent measures to safeguard the population's well-being. People, especially youth need to come forward and act before these catastrophes take a permanent toll.

Understanding the youth's outlook on air quality is crucial for several reasons.

Vulnerability of young individuals to health impacts of air pollution

Valuable perspectives of youth- a pivotal role in driving societal change (UNDP, 2023)

Inclusion of a forward-looking approach by youth in a policy framework

Significant representation of the country; India's status as the home to the world's largest youth population underscores the magnitude of this issue, with 27.2% aged 15-29, projected to decrease to 22.7% by 2036 but remaining substantial at 345 million (MoSPI, 2022).

Aims & Objectives



The primary goal of this project is to gain insight into the perspectives of the current young generation regarding air pollution. The established objectives focus on gauging their perception of air pollution as a potential threat, elucidating their thoughts on the primary contributors to this environmental concern, and comprehending their views on potential mitigation strategies.

Through a systematic exploration of these fundamental inquiries, the aim is to construct a comprehensive understanding of the young generation's awareness and attitudes toward air pollution. This research seeks to unravel their perspectives on the severity of the issue, identify perceived culprits, and discern their ideas on viable solutions for mitigating the adverse effects of air pollution.

Methodology



To comprehend the perspectives of the youth on air pollution, multiple voluntary surveys were executed during a range of events such as UN International Day, Kolkata Cycle Chapter, G20 ride, World Bicycle Day, World Health Day, National Press Day, Child Rights Week, Nature Conservation Day, Doctors Day Feedback, as well as various webinars and workshops. The surveys, **targeting individuals under 18**, utilised a predefined questionnaire. **Spanning the entirety of 2023, these surveys were carried out in three states: West Bengal, Jharkhand, and Odisha. 1,322 responses were gathered, distributed as 554, 572, and 196 from West Bengal, Jharkhand, and Odisha, respectively.** This refined dataset was subsequently analyzed and validated for a comprehensive understanding.

Findings

1. Perception of air pollution as a threat

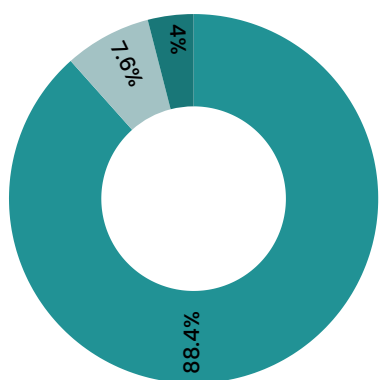


Figure 1: Awareness of air pollution as a threat to health among youths of West Bengal

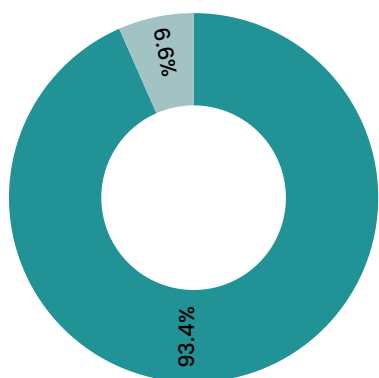


Figure 2: Awareness of air pollution as a threat to health among youths of Jharkhand

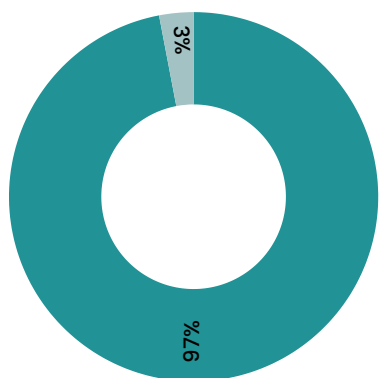


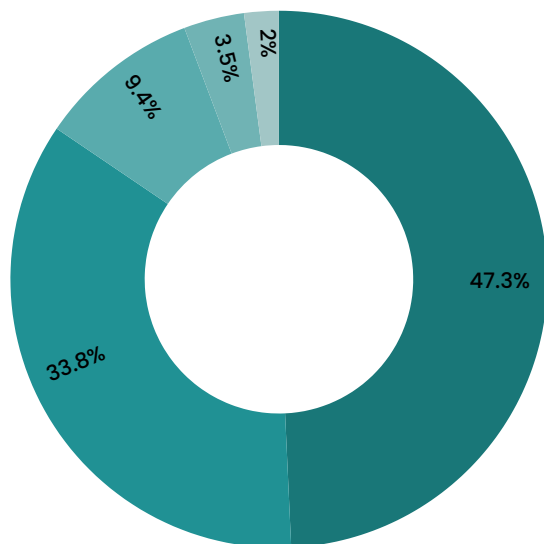
Figure 3: Awareness of air pollution as a threat to health among youths of Odisha



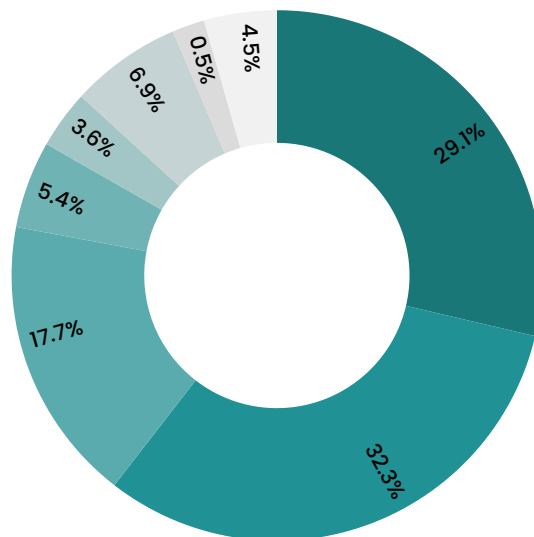
In West Bengal, 88.4% of surveyed youths see air pollution as a significant threat to human health; only 4% consider it non-threatening, and 7.6% are unsure (Figure 1). In Jharkhand, 93.4% believe air pollution poses a substantial health threat; just 6.6% disagree (Figure 2). In Odisha, 97% of youths perceive air pollution as a significant health threat; only 3% see it as non-threatening (Figure 3). The data indicates a high awareness level among youths regarding the threat of air pollution to human health.

2.Perception of the Largest contributor to air pollution

Perception on Sources of Air Pollution – Largest Contributor



Perception on Sources of Air Pollution – Second Largest Contributor



Perception on Sources of Air Pollution – Third Largest Contributor

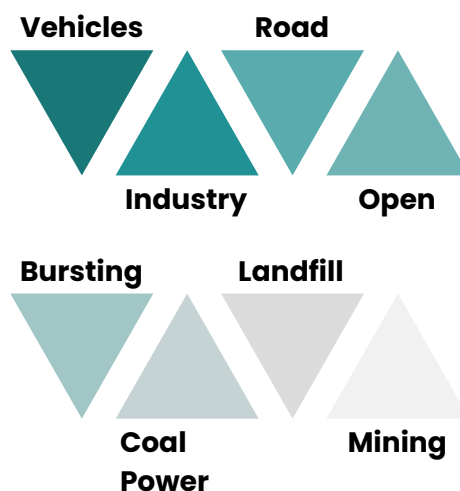
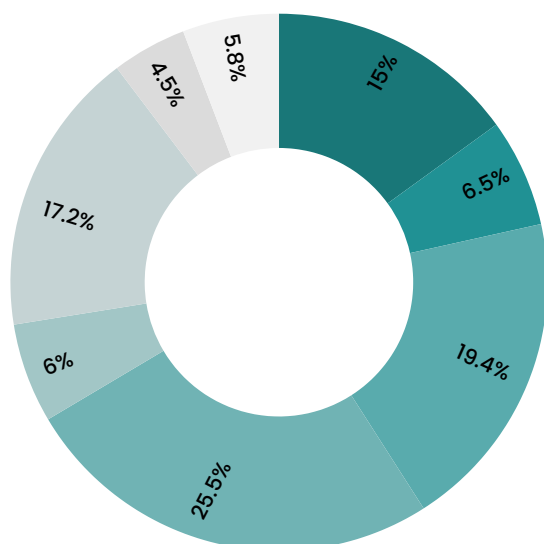


Figure 4: Youth's perception of the sources of air pollution in West Bengal based on their priority

Figure 4 reveals Bengal's youth's awareness of diverse air pollution sources, emphasizing vehicles and open waste. In West Bengal, 47.3% cite vehicles as the primary air pollution source and 33.8% point to industries. Road dust gains attention, with 17.7% and 19.4% ranking it second and third. Open waste is deemed the third-largest source by 25.5%, while 17.2% identify coal power plants.

Largest Contributor of Air Pollution Analysis (Gender - Age Crosstabulation)

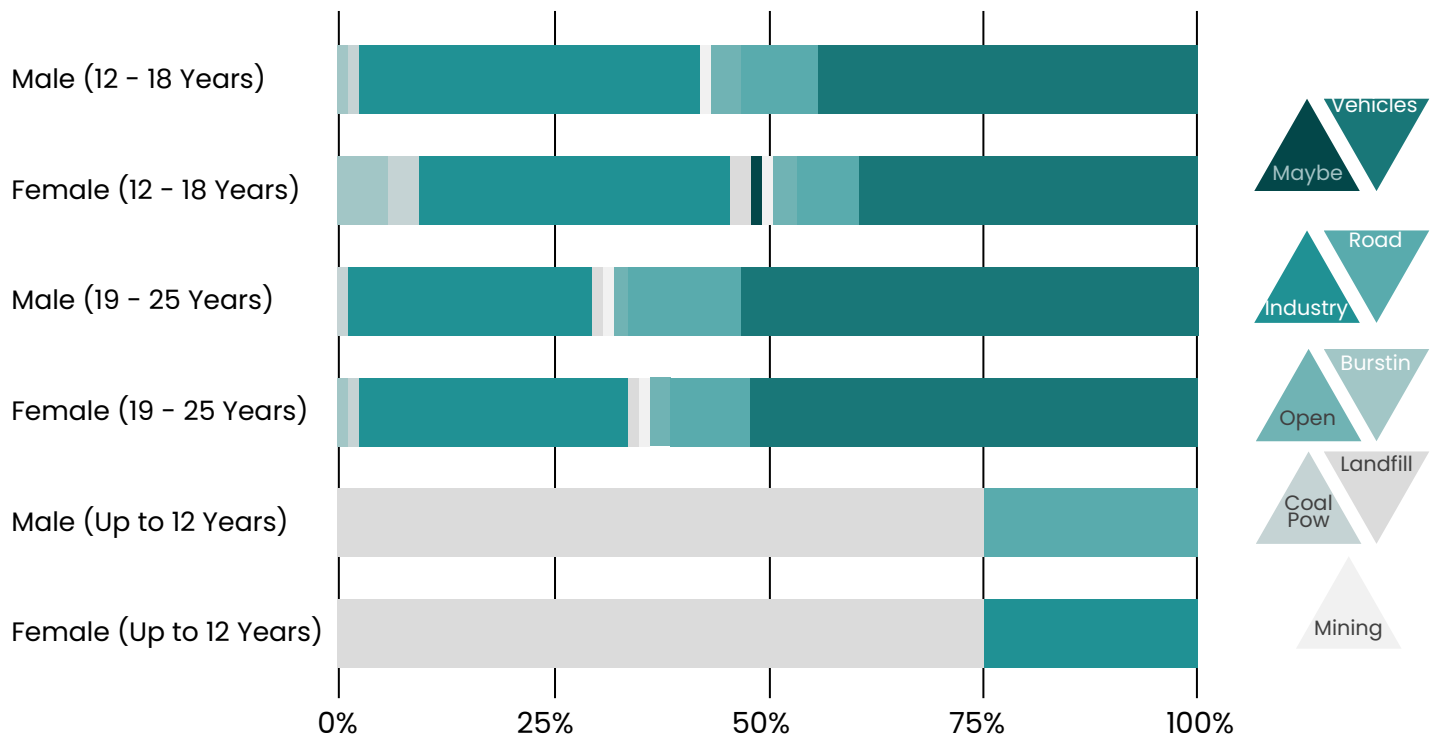
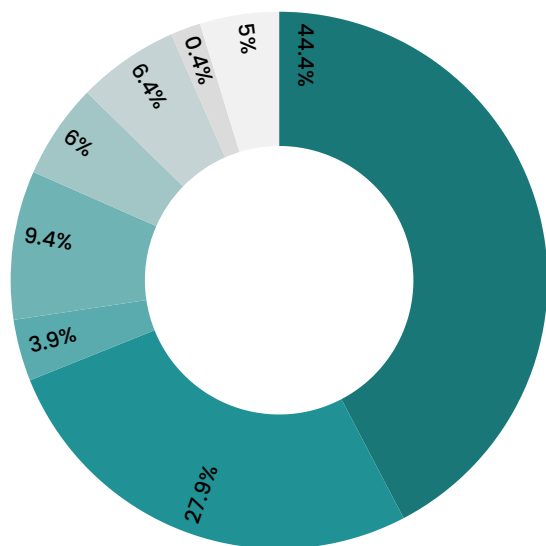


Figure 5: Gender-age crosstabulation for the largest contributor to air pollution in West Bengal

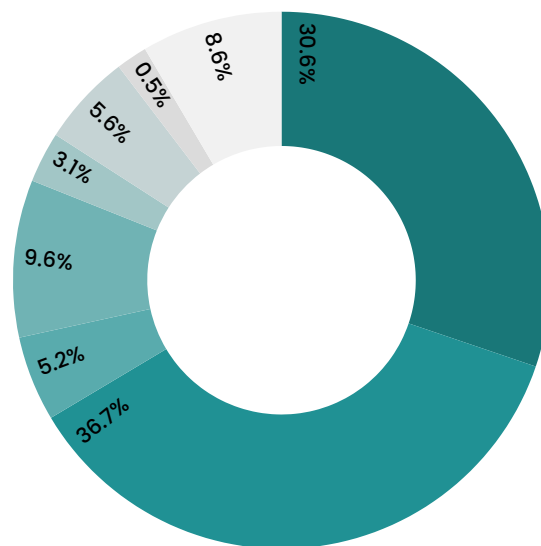


Vehicular emissions are a major concern for individuals aged 19 to 25, irrespective of gender (53% of males, 52% of females), particularly among collegegoers. Notably, all respondents express concern except males under 12. In the 12 to 18 age group, youth are notably concerned about industries as a major air pollution source. Female participation is limited (male-female response ratio 10:9). While road dust is a lower concern compared to vehicles and industries, it remains a worry for most age groups and genders, except females below 12. Respondents under 12 highlight landfills as the predominant air pollution source.

Perception on Sources of Air Pollution – Largest Contributor



Perception on Sources of Air Pollution – Second Largest Contributor



Perception on Sources of Air Pollution – Third Largest Contributor

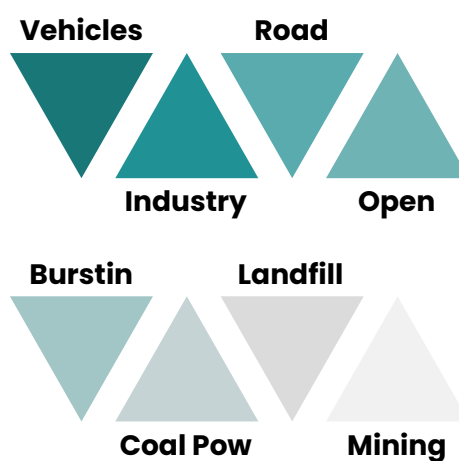
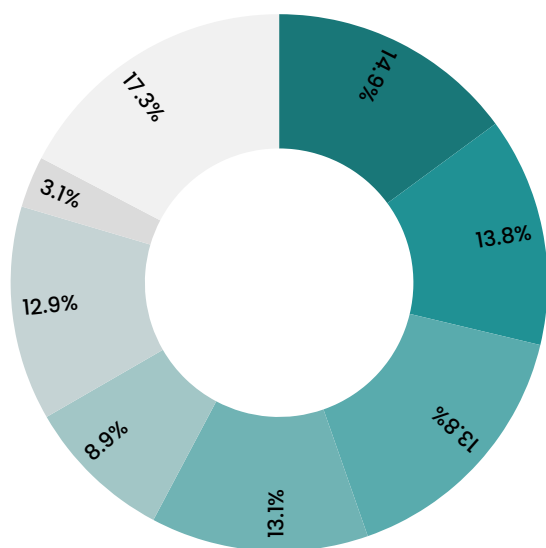
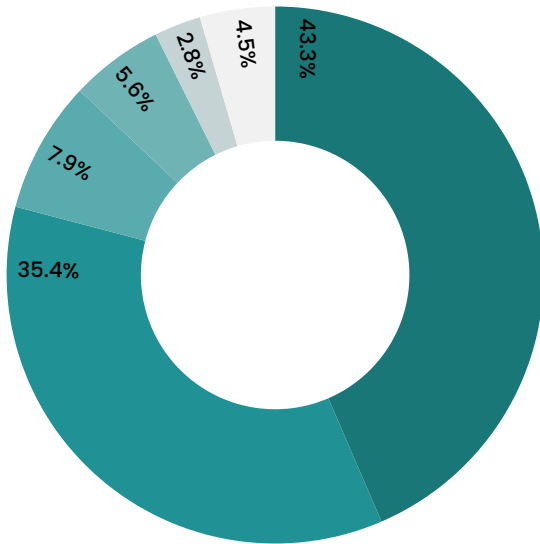


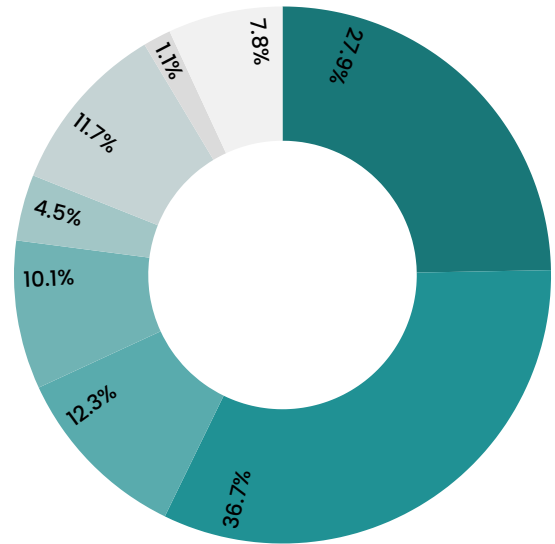
Figure 6: Youth's perception of the sources of air pollution in Jharkhand based on their priority

Similarly, Jharkhand's youth highlight vehicles and industries as primary air pollution contributors. Figure 5 shows that 44.4% identify vehicles as the main cause, with 30.6% and 14.9% choosing it as the second and third-largest factor. Notably, 36.7% see industries as the second most significant pollutant. They also emphasise coal-based power plants, mining, open waste, and road dust as noteworthy contributors, reshuffling the conventional leaders.

Perception on Sources of Air Pollution – Largest Contributor



Perception on Sources of Air Pollution – Second Largest Contributor



Perception on Sources of Air Pollution – Third Largest Contributor

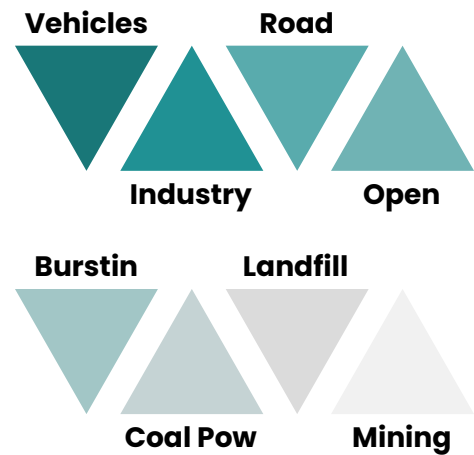
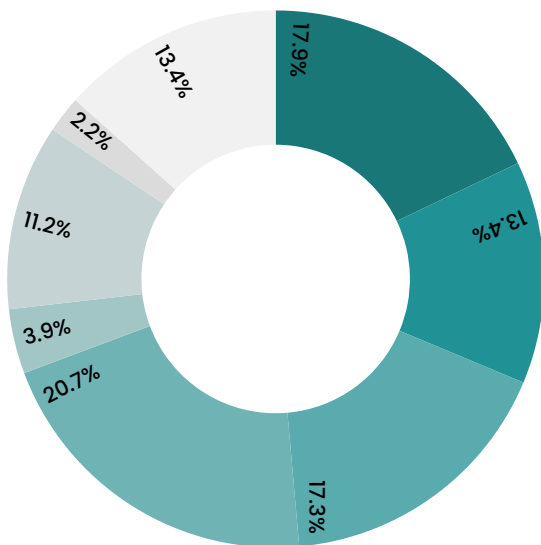


Figure 7: Youth’s perception of the sources of air pollution in Odisha based on their priority

In Odisha, 35% of youth identify vehicles as the main air pollution source. Additionally, 27.9% and over 17% recognize vehicles as the second and third-largest contributors. Odisha's youth point to coal-based power plants, mining, open waste, and road dust as significant contributors, diminishing the conventional leaders. Awareness of landfill pollution seems limited, with low percentages across all three choices (largest contributor: 0%, second-largest contributor: 1.1%, and third-largest contributor: 2.2%).

3.Perception of Mitigation strategies for air pollution

Figure 4 reveals Bengal's youth's awareness of diverse air pollution sources, emphasizing vehicles and open waste. In West Bengal, 47.3% cite vehicles as the primary air pollution source and 33.8% point to industries. Road dust gains attention, with 17.7% and 19.4% ranking it second and third. Open waste is deemed the third-largest source by 25.5%, while 17.2% identify coal power plants.

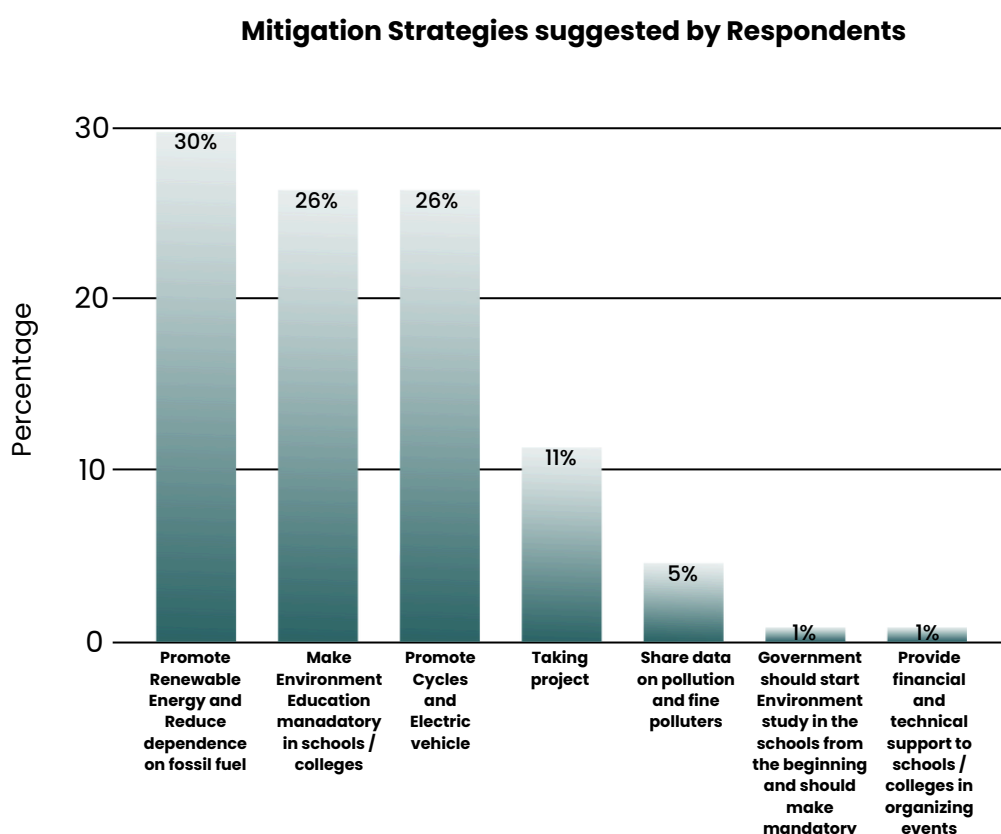


Figure 8: Air Pollution mitigation strategies suggested by the youths of West Bengal

- West Bengal's youth actively advocate for government promotion of renewable energy (30%) to reduce dependence on fossil fuels, thereby directly alleviating the state's air pollution situation.
- In West Bengal, 26% of students endorse mandatory environmental education in educational institutions, urging the government to embrace this vital strategy for effectively tackling and addressing the challenges posed by air pollution.
- In West Bengal, 26% of the youth emphasize the significance of urging the government to prioritize eco-friendly transportation, including traditional cycles and modern electric vehicles. They view this as a crucial solution to mitigate air pollution in urban areas.

Mitigation Strategies suggested by Respondents

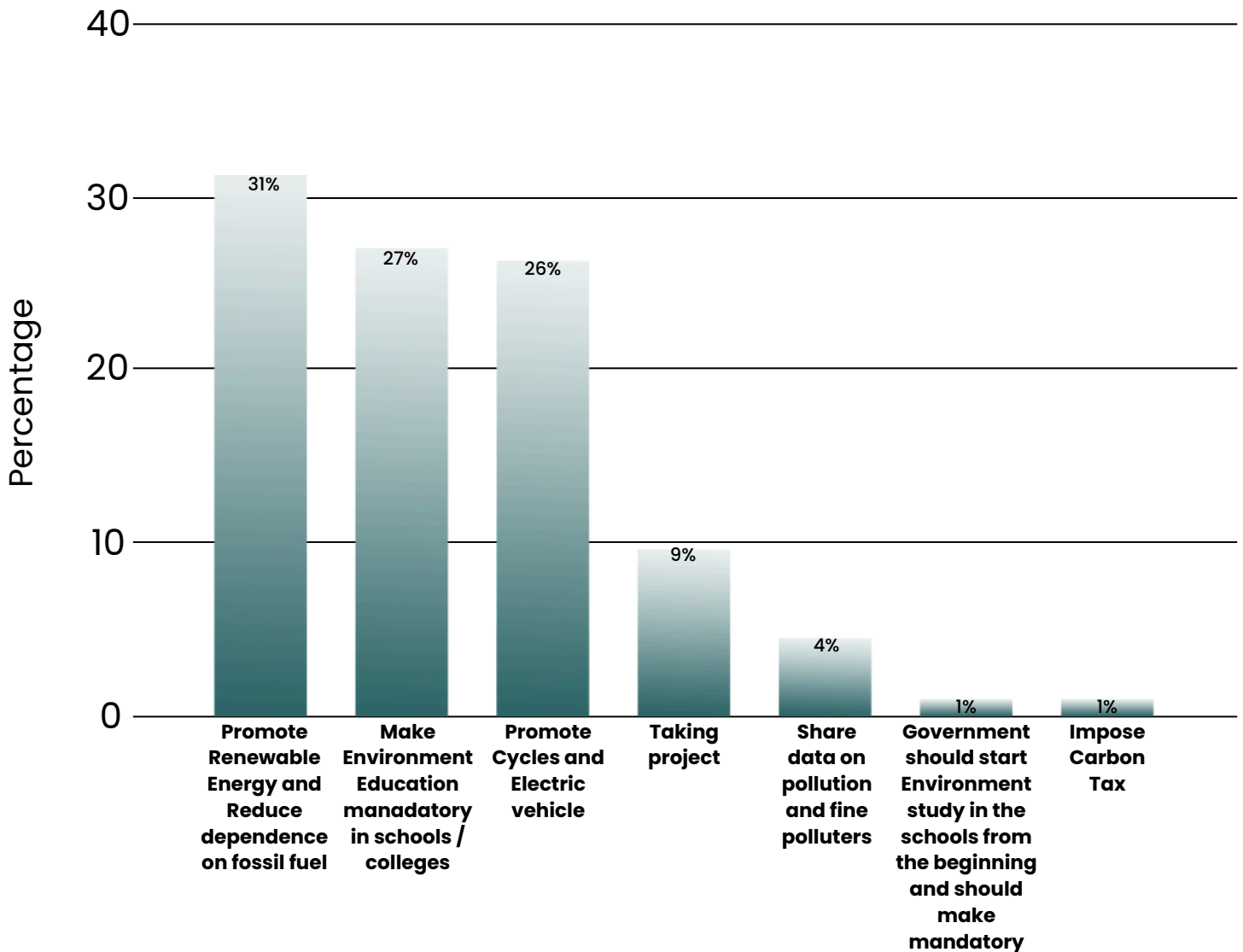


Figure 9: Air Pollution mitigation strategies suggested by the youths of Jharkhand

- Jharkhand's youth strongly recommend (31%) that the government promote renewable energy to decrease reliance on fossil fuels, directly mitigating the state's air pollution scenario.
- In Jharkhand, 27% of students support compulsory environmental education in schools and colleges, urging the government to adopt this crucial strategy to effectively address and combat air pollution.
- 26% of Jharkhand's youth stress the importance of encouraging the government to prioritize eco-friendly transportation, such as traditional cycles and modern electric vehicles, as a solution to alleviate air pollution in urban areas.

Mitigation Strategies suggested by Respondents

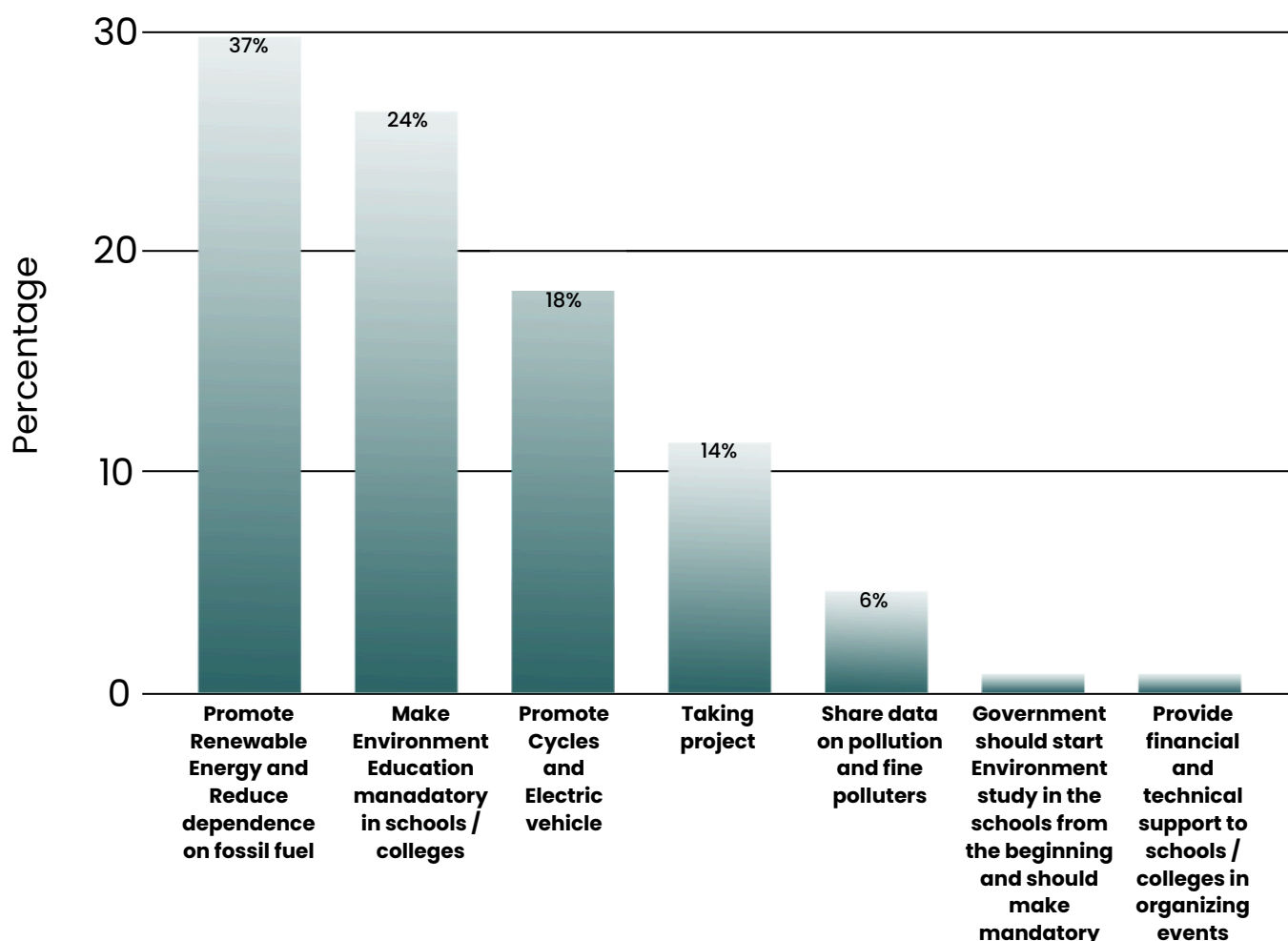


Figure 10: Air Pollution Mitigation Strategies Suggested by the Youths of Odisha

- 30% of students in Odisha advocate for mandatory environmental education in schools and colleges, urging the government to adopt this approach as a crucial strategy in addressing and combating air pollution.
- 24% of Odisha's youth emphasizes urging the government to prioritize environmentally friendly transportation, including traditional cycles and modern electric vehicles, as a solution to mitigate air pollution in urban areas.
- Odisha's youth suggested other vital steps to the government in terms of advocating for the promotion of renewable energy (18%) to reduce reliance on fossil fuels and seeking financial/technical support for awareness programs and events (14%) to address air pollution.

Observations

In **West Bengal**, the majority of youths, regardless of age or gender, are **highly aware of air pollution sources**. They emphasize vehicular emissions, **urging the promotion of cycling and electric vehicles**. The focus is on eco-friendly transportation policies to address transport and air pollution issues. Environmentally conscious West Bengal youth **seek to enhance awareness of air pollution's health impacts**, implementing initiatives like school events for educational objectives. They express concerns about industries and coal power, actively endorsing renewable energy to reduce reliance on fossil fuels.

Jharkhand's youth, showing a notable **93.4% awareness of air pollution's health impact**, identify vehicles and industries as primary culprits. They advocate **sustainable solutions**, supporting renewable energy, compulsory environmental education, and eco-friendly transportation to combat air pollution effectively.

In **Odisha**, environmentally conscious youth prioritize raising awareness about air pollution's health impacts, employing events in schools and colleges. They highlight vehicles as a major concern, advocating for cycling and electric vehicles, and **emphasizing policies for eco-friendly transportation**. Odisha's youth express **concerns about industries and coal power**, endorsing renewable energy to reduce reliance on fossil fuels.

Way forward

- In **West Bengal**, strategic initiatives should **prioritize policy advocacy for eco-friendly transportation**, promoting cycling and electric vehicles. Simultaneously, implementing comprehensive **environmental education programs** in schools and colleges is crucial to instil early awareness of air pollution's health impacts. Collaborating with government initiatives is essential for **promoting renewable energy sources** aligned with youth-endorsed cleaner alternatives. Addressing industrial contributions to air pollution requires **community-driven initiatives**, fostering collective responsibility. **Establishing air quality monitoring systems** provides real-time data for targeted mitigation. Policy measures should incentivize green innovations and support youth-led organizations for a sustainable and healthier future.
- For **Jharkhand**, the strategy involves **health education campaigns** and **policy reforms** to address contributors like vehicle emissions and expediting renewable energy integration. Enhancing the educational system with compulsory environmental education and promoting **eco-friendly transportation initiatives** are crucial steps. These measures aim to create a sustainable and healthier future.
- In **Odisha**, environmentally conscious youth plan to heighten awareness about air pollution's health impacts, **advocating for policies** that address both transport and air pollution issues. They emphasize a **shift to renewable energy** to reduce dependency on fossil fuels from industries and coal power, aligning with a sustainable policy framework.

References

Gurjar, B. R. (2021, April 5). Air pollution in India: Major issues and challenges. TERI.

<https://www.teriin.org/article/air-pollution-india-major-issues-and-challenges>

UNDP. (2023, August 11). Five ways young people are contributing to their communities.

<https://www.undp.org/stories/five-ways-young-people-are-contributing-their-communities>

MoSPI. (2022). Youth in India 2022.

https://mospi.gov.in/sites/default/files/publication_reports/Youth_in_India_2022.pdf?download=1

www.SwitchON.org.in      @SwitchONIndia

SwitchON Foundation, established in 2008, is a leading non-profit organisation focusing on Environment Sustainability and Equal Opportunities. Operating in 10 Indian states. It leads initiatives in Clean Energy Access, Sustainable Agriculture, Skilling, Clean Air and Sustainable Cities. Key strengths encompass innovative project implementation, capacity building, field support, awareness and advocacy.

